WHAT IS CLAIMED IS:

1. A magneto-resistance effect element bar exposure method comprising the steps of:

detecting the positions of a plurality of alignment marks formed on a substrate;

correcting an exposure position correction region on the basis of the positions of the detected alignment marks; and

exposing a resist that is coated on the substrate,

wherein a magneto-resistance effect element bar region comprises a plurality of magneto-resistance effect elements arranged in the longitudinal direction of the bar region; and

one exposure position correction region is established for one magneto-resistance effect element bar region.

2. The magneto-resistance effect element bar exposure method according to claim 1,

wherein one magneto-resistance effect element bar region does not straddle the boundary of the exposure position correction region.

3. The magneto-resistance effect element bar exposure method according to claim 1,

wherein the exposure is electron beam exposure.

4. A magneto-resistance effect element bar formation method, comprising the steps of:

developing a resist exposed by means of the magneto-resistance effect element bar exposure method according to claim 1;

forming a magneto-resistance effect element pattern by using a mask constituted by the developed resist;

cutting the magneto-resistance effect element bar from the substrate; and

polishing the cut faces parallel to the longitudinal direction of the magneto-resistance effect element bar.

5. A magneto-resistance effect element bar that comprises a plurality of magneto-resistance effect elements arranged in the longitudinal direction of the bar,

wherein the interval between neighboring magneto-resistance effect elements in the thickness direction of the magneto-resistance effect element bar and in a direction perpendicular to the longitudinal direction thereof is equal to or less than 0.05 μm.

6. A control method for an exposure device that comprises a drive system for shifting a substrate, which is coated with a resist sensitive to beam exposure and from which a magneto-resistance effect element bar is cut, in a direction within the substrate plane; a beam exposure source for applying a beam to the substrate; beam shifting means for shifting the beam to the desired position on the substrate; and a control system for controlling the drive system and the beam shifting means,

wherein, when the magneto-resistance effect element bar is exposed, the control system controls the drive system so that the substrate is shifted only in the longitudinal direction of the magneto-resistance effect element bar.